

**REMARKS**

By the present amendment, claims 1, 5-7, 11, and 15 have been amended.

The amendments to claim 1 are based on page 15, lines 14 to 18, page 17, lines 11 to 12, page 67, lines 11 to 17, and page 205, lines 21 to 25 on of the specification. Claims 1, 4-8, and 10-20 are pending in the application.

Claims 5-8, 11, and 15 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. It is respectfully submitted that the amendments to the claims overcome this rejection by correcting the dependency and deleting the expression "type of."

Claims 1, 7, 10, 14-17, and 19-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U.S. Patent No. 6,413,710 to Shor et al. and U.S. Patent 4,332,889 to Siga et al. This rejection is respectfully traversed. From the description in column 14, line 61 to column 15, line 2 of Shor it is understood that the "average particle size" described in Shor is a circle-equivalent diameter measured by a projected area method which is different from the sphere-equivalent diameter used in the present invention. Since the measurement method for the average circle-equivalent diameter and that of the average sphere-equivalent diameter are different, and the measured values thereof may also be different depending on the shape of measured

particles, it is impossible to directly see a correspondence between the values of the circle-equivalent diameter and the sphere-equivalent diameter. Accordingly, it cannot be deemed that Shor teaches the photosensitive silver halide having the sphere-equivalent diameter as claimed in the present invention.

Shor teaches a preparation of a photosensitive silver halide formed in the presence of a hydroxytetrazaindene or an N-heterocyclic compound having a mercapto group to obtain a photothermographic emulsion having a high contrast property. In column 10, lines 18 to 24 of Shor describes that the advantage of the thus-obtained photosensitive silver halide is provided by the addition of at least  $10^{-5}$  mol/mol of silver halide, more preferably  $10^{-3}$  to  $3 \times 10^{-3}$  mol/mol of silver halide.

In contrast, the silver iodide complex forming agent of the present invention is intended to substantially reduce visible light absorption caused by the photosensitive silver halide after thermal development. The object and effect of the silver iodide complex forming agent of the present invention is different from that of the hydroxytetrazaindene or the N-heterocyclic compound of Shor, and thus the amount of the silver iodide complex forming agent of the present invention is much larger than that of the photosensitive silver halide of Shor.

In column 14, lines 8 to 39 Shor describes that silver bromide and silver bromoimide having up to 10% silver iodide are preferably used in the photothermographic emulsion, and the photosensitive silver halide grain of Shor preferably has a cubic or tabular shape. However, Shor fails to teach or suggest that the photosensitive silver halide has a tabular shape and a silver iodide content of 90 mol% to 100 mol% of silver iodide.

Shor includes no concrete disclosure or suggestion regarding the photothermographic material having image-forming layers disposed on both sides of the support and being capable of being exposed imagewise by using an X-ray intensifying screen. It should be noted that, by having the specific silver iodide content in the image-forming layers of the specific configuration, the unexpected effects of the present invention of improved haze after thermal development, improved printout (image stability), and high sensitivity obtained by suppressing  $D_{min}$  (fogging) to a low degree can be obtained.

In order to further clarify the unexpected effects of the present invention, please file the attached Declaration that compares the imaging material of Shor with the present invention.

The disclosure of Shor fails to include an embodiment which has

image-forming layers containing tabular photosensitive silver halide grains and a silver iodide complex forming agent, the image-forming layers disposed on both sides of a support and exposed imagewise by using an X-ray intensifying screen. Accounting for this, comparative examples (Examples 3 to 6) of the experiment in the Declaration were prepared so as to have an image-forming layer, a first protection layer and a second protection layer applied on each side of a support. The results shown in the Declaration clearly demonstrate the superior effects of the present invention.

The secondary reference to Siga does not cure the deficiencies of the Shor patent. Siga does not relate to a photothermographic material; therefore it is not seen that one of ordinary skill in the art would change the silver iodide content of Shor based on the disclosure of Siga. Therefore it is respectfully requested that this rejection be withdrawn.

Claims 4-6 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shor and Siga and further in view of U.S. Patent No. 4,459,353 to Makasky.

Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shor and Siga and further in view of U.S. Patent No. 6,093,529 to Tsuzuki et al.

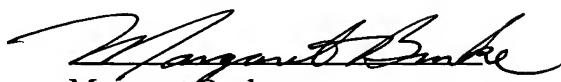
Claims 7, 17, and 19-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shor and Siga and further in view of U.S. Patent No. 6,576,410 to Zou et al.

Claims 11-13 were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shor and Siga and further in view of U.S. Patent No. 6,787,298 to Goto et al. and U.S. Patent No. 6,120,983 to Okada et al.

None of the tertiary references used in the above rejections remedies the deficiencies in the combination of Shor and Siga noted above. The tertiary references describe various additives to photothermographic materials. However there is no motivation to combine them with the primary references and, even if such combination were tenable, the present invention still would not be taught or suggested. Therefore it is respectfully requested that these rejections be withdrawn.

In view of the foregoing amendments and remarks, it is respectfully submitted  
that all of the pending claims are in condition for allowance. Favorable action is  
respectfully requested.

Respectfully submitted,



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